

Claims:

1. (Currently amended) An implantable surgical drain to be placed against a tissue of a patient's body for draining fluid and sensing at least one physiological property of the tissue comprising:

an elongated conduit configured to be implanted in a patient's body and to rest against ~~but not penetrate~~ the tissue of the body, and to drain wound fluid from the body, the elongated conduit including a first and a second surface on an outer side of the elongated conduit;

at least one sensing element positioned on the first surface of the elongated conduit configured to sense a physiological property of the tissue; and

an inflatable compartment positioned behind the sensing element, configured to push the sensing element against the tissue so as to enhance contact between the sensing element and the tissue.

2. (Cancelled).

3. (Previously presented) The surgical drain of claim 1, wherein the inflatable compartment is within the elongated conduit.

4. (Previously presented) The surgical drain of claim 1, wherein the sensing element and the inflatable compartment are positioned at about the same position along the length of the surgical drain.

5. (Original) The surgical drain of claim 1, wherein the physiological property is selected from the group comprising: oxygenation, perfusion, temperature, pH, NADH levels, biochemical composition, drug concentration, turgidity or pressure.

6. (Previously presented) The surgical drain of claim 1, further comprising multiple sensing elements configured to sense different physiological properties.

7. (Previously presented) The surgical drain of claim 1, wherein the conduit includes a drain portion configured to rest against a substantial length of the tissue within the body and a plurality of drain openings spaced along substantially the entire length of the drain portion.

8. (Previously presented) The surgical drain of claim 1, further including a display configured to depict data corresponding to the physiological property sensed by the sensing element.

9. (Original) The surgical drain of claim 1, further comprising a pump in communication with an interior portion of the inflatable compartment.

10. (Original) The surgical drain of claim 1, further comprising a pressure monitor in communication with the interior portion of the inflatable chamber.

11. (Previously presented) The surgical drain of claim 1, wherein the surgical drain further includes an anchor configured to stabilize the position of the surgical drain relative to the tissue in the body.

12. (Previously presented) The surgical drain of claim 1, wherein the surgical drain further includes a projection extending from the outer side, wherein the projection is configured for insertion into tissue in the body.

13. (Original) The surgical drain of claim 1, wherein the surgical drain further includes a first loop extending from the outer side.

14. (Original) The surgical drain of claim 1, wherein the surgical drain further includes adhesive on at least a portion of the outer side.

15. (Original) The surgical drain of claim 1, wherein the surgical drain further includes a flap extending from the outer side.

16-102. (Cancelled).